55. (New) The catheter of claim 54 wherein said mandrel is formed by annealing to induce a higher crystallinity such that said proximal section is stiffer than said distal section.

56. (New) The catheter of claim 51 wherein a diameter of said proximal section is larger than a diameter of said distal section of said uniformly tapered mandrel.

REMARKS

Claims 1-10 are canceled, and new claims 11-56 are added. No new matter is added by this amendment.

Applicants respectfully request allowance of all pending claims. If a telephone interview would expedite such allowance, the Examiner is requested to contact Suk S. Lee at (408) 720-8300.

DEPOSIT ACCOUNT AUTHORIZATION

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due and to credit our account for any overpayment. Furthermore, if an extension is required, then Applicants hereby request such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: March 5, 2001

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The following is a marked-up version of the prior pending paragraphs with all changes.

The first full paragraph on page 4, beginning on line 3:

The mandrel 24 of the prior art is fabricated from a metal or metal alloy (hereinafter metal) rod. The metal mandrels 24 known in the prior art, however, have several inherent limitations. First, metal rods are generally too stiff for angioplasty procedures, and a too stiff rod reduces a catheter's trackability over a guidewire or other medical device. Not only is the rod often too stiff, but a metal rod is also more difficult to process. For example, the metal rod must be ground to the desired diameter for the various (i.e., proximal and/or distal) section and often still retains sharp edges along [it's] its length that can damage the interior of the catheter shaft. Further, the dimensions of a metal mandrel are fixed during fabrication.

The third paragraph on page 7, beginning on line 17:

Figures 1A and 1B are illustrations of a reinforcing mandrel 24 [a] used with a dilatation catheter 10. The catheter 10 has an inner tubular member 12 with an inner lumen 14 adapted to receive a guidewire (not shown). An outer tubular member 16 is generally disposed about the inner tubular member 12 such that the inner tubular member 12 extends through the outer tubular member 16 and an outer lumen 18 is defined therebetween. The inflatable member (e.g., a balloon) 20 has a proximal end 21 that is secured to the distal end of the outer tubular member 16, and a distal end 23 that is secured to the distal end of the inner tubular member 12 so as to seal off the outer lumen 18 and the interior of the inflatable member 20.

The first full paragraph on page 9, beginning on line 4:

Whereas with the prior art metal mandrel, grounding is one of the few means for tapering the diameter (i.e., having a diameter that gets smaller as the length of the mandrel is traversed from the proximal end to the distal end) and achieving a varying stiffness (the larger the diameter the more stiff the mandrel), non-metal mandrels may have dimensional and morphological changes achieved in a variety of ways. For example, the diameter of a non-metal mandrel [maybe] may be tapered from the proximal end to the distal end, by a taper extruding, or by necking the mandrel at high temperatures during the initial fabrication of the mandrel. Sometimes, annealing the proximal portion of the mandrel induces a higher crystallinity which also makes the annealed proximal portion of the mandrel more stiff than the non-annealed distal portion of the mandrel.